

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 2-3 and 5-18 are now pending in this application. Claims 2 and 9 are independent. Claims 2 and 9 have been amended. Reconsideration of this application, as amended, is respectfully requested.

Objection to the Drawings

The Examiner has objected to the drawings because the remote control must be shown or the feature canceled from the claims.

In order to overcome this objection, Applicants are concurrently submitting Proposed Drawing Corrections for the Examiner's approval, which address each of the deficiencies pointed out by the Examiner. Particularly, Fig. 3 has been added to show a remote control. Accordingly, reconsideration and withdrawal of this objection are respectfully requested.

Rejection Under 35 U.S.C. § 112, 1st Paragraph

Claims 5-7 stand rejected under 35 U.S.C. § 112, 1st Paragraph. This rejection is respectfully traversed.

Claims 5,6

With regard to claim 5, the Examiner states that the original specification does not disclose an “indication signal”. The Applicants submit that support for transmitting an indication signal to indicate whether the OSD is being transmitted through the digital connection is provided in paragraph [029] of the Applicants’ specification. Support for transmitting an indication signal to indicate whether the OSD is being transmitted through the digital connection is provided in paragraph [031] of the Applicants’ specification. Controlling unit 110 transmits this status e.g., indication signal.

Claim 7

With regard to claim 7, the Examiner states that the original specification does not disclose “said step of judging whether a transmission of an OSD is needed or not, includes sensing a user’s input requesting a setting status or command to change a control parameter”.

In order to address the Examiner’s rejection, the Applicants submit that the specification discloses (1) sensing a user’s input requesting a setting status, and (2) sensing a command to change a control parameter. Further, the Applicants submit that these are included in the process of judging whether a transmission of an OSD is needed.

In this regard, Applicants’ specification disclose that a remote controller is used for (1) identifying the operation conditions, and (2) setting the

controlling parameters of an appliance. Identifying the operating conditions is analogous to (1) requesting a setting status, and setting the control parameters is analogous to (2) changing a control parameter. Without contradiction, when a remote controller user input key is depressed, either information will be displayed (request) or something will be changed (command).

Support for (1) and (2) is found in paragraph [037], which sets forth the following:

For identifying the operation conditions and setting the controlling parameters of an appliance, the remote controller of the appliance is used. The digital connection between the signal input apparatus 200 and the signal output apparatus 100 is able to be made, so that the OSD screen for setting the operations and controlling parameters of the signal output apparatus 100 is able to be displayed using the remote controller of the signal input apparatus 200. By this arrangement, the user is able to input commands for the signal output apparatus 100 even if the signal output apparatus 100 is located in a place where the signal input apparatus 200 is not located.

Applicants' specification, paragraph [037]

The remaining question is whether the specification discloses that (1) and (2), as set forth above, bear a relationship to the step of judging whether a transmission of an OSD is needed. The Applicants submit that the answer to this question is in the affirmative, and the confirmation is found in paragraph [028], which is set forth below:

If the user pushes a certain key on the remote controller of the signal output apparatus 100 in order to display user inputs, this results in identifying information about the signal output apparatus 100 being displayed in an OSD form. The controlling

unit 110 decides whether the volume of the OSD is larger than a certain volume, which may be preset.

Applicants' specification, paragraph [028]

Clearly then, the specification provides that the process of judging may be initiated by the pressing of a key on a remote controller to receive status, or to execute a command. In view of the discussion set forth above, the Applicants respectfully submit that the claims are fully supported by and adequately described in the written description of the invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejection Under 35 U.S.C. § 102

Claims 2, 3 and 5-18 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Fig. 1 of the Applicants' drawings. This rejection is respectfully traversed.

The Examiner asserts that Fig. 1 is prior art because it is labeled "Conventional Art". The Applicants submit that this labeling is an error (obvious error), and therefore proposed drawing changes are submitted herewith to delete the label "Conventional Art".

MPEP 2163.07 provides that an amendment to correct an obvious error does not constitute new matter where one skilled in the art would not only recognize the existence of error in the specification, but also the appropriate correction. *In re Oda*, 443 F.2d 1200, 170 USPQ 260 (CCPA 1971).

Paragraph [019] provides that Figure 1 is a block diagram showing a connection between appliances, according to an embodiment of the present invention. Figure 1 is not mentioned in the “Description of the Background Art”. Figure 1 is only discussed in the “Detailed Description of the Preferred Embodiments” (see paragraph [022]).

One skilled in the art would recognize that the mislabeling of Figure 1 as “Conventional Art” is an obvious error, and therefore Figure 1 is not usable as a prior art reference in rejecting claims 2, 3 and 5-18. Reconsideration and withdrawal of this art grounds of rejection are respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 2, 3 and 5-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shintani. This rejection is respectfully traversed.

Claim 2

While not conceding the appropriateness of the Examiner’s rejection, but merely to advance prosecution of the instant application, Applicants respectfully submit that independent claim 2 has been amended to recite a combination of elements in a method for transmitting digital AV (Audio/Video) contents and an on-screen display (OSD), including the steps of judging whether a transmission of an OSD is needed or not; if so, checking a volume of the OSD; determining

whether the volume of the OSD is larger than a certain volume, and if so transmitting the OSD to a switching unit through an analog connection, and if the volume is not larger than the certain volume, transmitting the OSD to a switching unit through a digital connection; and Selecting and displaying one of either said digital AV contents or the OSD.

Applicants respectfully submit that this combination of elements as set forth in independent claim 2 is not disclosed or made obvious by the prior art of record, including Shintani.

The Examiner asserts that Shintani teaches "In the case where the video and OSD signals are simply superposed, an inexpensive CMOS switch can be used if the signal bandwidth is not very large". The implication then, (according to the Examiner) is that Shintani implies or suggests that the OSD would be transmitted digitally if the signal is too large. The Applicants respectfully disagree.

In Shintani, video switching unit 370 selects (for display) either one of an OSD signal input thereto (from analog input terminal 170 or from CPU 350) or a video signal input thereto (from decoder 360). Video switching unit 370 may display either one of the OSD signal or the video input signal. Alternatively, switching unit 370 may overlay the OSD signal onto the video signal and display (not transmit) both. Still further, switching unit 370 may superimpose the OSD signal onto the video signal and display (not transmit) both instead of selecting between the two. In such a case (superimposition), an inexpensive

CMOS switch can be used (if the signal bandwidth is not very large).

Therefore, there are four display options available in Shintani:

1. Display video
2. Display OSD
3. Overlay OSD onto video and display both
4. Superimpose OSD onto video and display both

The option of using display option 4 is in no way negated by the large size of signal bandwidth. The large size of the signal bandwidth only negates the use of the simple CMOS switch to implement option 4. The implication here is that some other form of switching unit 370 must be used if option 4 is to be implemented successfully (in case of a very large bandwidth). Another implication/option is than in the case of a very large signal bandwidth, a choice is available to not use option 4 at all. An easy alternative is to select one of options 1-3 instead.

Further, the “very large” bandwidth is not attributed to the OSD signal alone. Rather, the large bandwidth results from the combined (superimposed) OSD and video signals. Therefore, there is no implication in Shintani that the OSD signal should be transmitted separately and “digitally” if the combined bandwidth is too large. Rather, the implication (as stated above) is that a simple CMOS switch cannot be used in the case of both a display option of superimposition (option 4) and combined large bandwidth. In case of a large

bandwidth (when option 4 is selected), some form of switching device other than a simple CMOS switch must be used in order to implement option 4.

Further, if the OSD were to be displayed separately, then the superimposition option (option 4), which caused the large bandwidth problem in the first place, would no longer be needed. Option 2 already provides for displaying the OSD signal separately (without a need for digital transmission).

It is here noted that combination of steps recited in independent claim 2 includes selecting and displaying one of either said digital AV contents or the OSD. Therefore, even at the outset, since option 4 requires displaying both signals instead of one or the other, option 4 of Shintani works contrary to the result sought by the combination of elements recited in claim 2. In other words, the volume of OSD is not an issue to be concerned with when selecting or displaying one signal or the other. A volume of OSD only becomes a concern when attempting to select and display both the video signal and the OSD simultaneously (superimposition).

Therefore, even if the bandwidth was too large to transmit both signals simultaneously (one superimposed upon the other), option 2 of Shintani is already available to transmit the OSD separately from the video signal. Reconverting a signal for digital transmission is not required in order to exercise this option in Shintani.

For the reasons provided above, Shintani fails to teach or suggest the above-recited features of independent claim 2 (as amended). It follows that one

of ordinary skill in the art would find neither motivation, nor suggestion to modify the system of Shintani by providing a digital channel when the OSD information may not be transmitted through the digital channel in order for the receiver to be able to receive both the digital signal as well as OSD information, when the bandwidth or volume of the signal is too large for analog transmission, as asserted by the Examiner.

Claim 9

Independent claim 9 has been amended to recite a combination of elements in a system, including first controlling unit checks a size of the needed OSD, compares a size of the needed OSD to a preset size, and based upon the comparison, transmits the OSD over one of the digital transmission terminal or the analog transmission terminal to a switching unit; and the switching unit for selecting and displaying one of either the digital AV content or the OSD.

The same arguments set forth above with respect to independent claim 2 apply to independent claim 9. That is, in Shintani, a size of OSD is not an issue to be concerned with unless attempting to transmit the OSD and video signal simultaneously, thereby increasing bandwidth. Otherwise, Shintani does not teach or suggest checking a size of OSD when selecting and displaying one of either the digital AV content or the OSD. This issue only arises when attempting to select and display both signals simultaneously.

It is here noted that the Examiner's interpretation of Shintani requires that the analog transmission unit and the switching unit of the Applicants' claimed invention be one and the same (switching unit 370 of Shintani). However, in light of the combination set forth in claim 9, switching unit 370 cannot meet both the analog transmission terminal, which transmits to a switching unit and also meet the switching unit itself. In the Applicants' invention, one unit transmits a signal to the other unit; the other unit selects and displays the signal it receives. The switching unit 370 of Shintani cannot perform both of these functions with respect to itself. Reconsideration and withdrawal of this art grounds of rejection is respectfully requested.

With regard to dependent claims 3, 5-8 and 10-18, Applicants submit that claims 3, 5-8 and 10-18 depend, either directly or indirectly, from independent claims 2 and 9, which are allowable for the reasons set forth above, and therefore claims 3, 5-8 and 10-18 are allowable based on their dependence from claim 2 and 9. Reconsideration and allowance thereof are respectfully requested.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and as such, the present application is in condition for allowance.

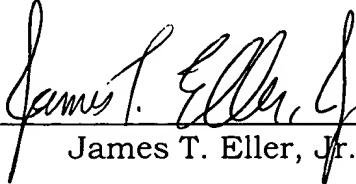
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mr. Percy L. Square (Reg. No. 51,084) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASH & BIRCH, LLP

By



James T. Eller, Jr., #39,538

P.O. Box 747
Falls Church, VA 22032-0747
(703) 205-8000

JTE/PLS

Enclosures: One replacement drawing sheet (Fig. 1)
 One new drawing sheet (Fig. 3)